(TMI Focus, Vol. XIV, No. 1, Fall 1992)

## **DESIGNER SOUND**

by Dean Lusted, MD

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Cosmetics and clothing reflect the restlessness with which the individual has viewed himself in every society; nutrients and the accouterments of ritual reflect the relentless inquiry and exploration into his mind, his being. Which means have proven fatal, irreversible, or deforming? Which means have proven healthful, beneficial to his role, and supportive of his personal evolution?

The specificity of the alteration attempt could be examined as personal versus environmental; single sensory versus multiple sensory. The use of incense in a cathedral filled with art and music is multiple sensory environmental alteration in which the individual places himself, seeking his own altered response. Chemicals can likewise alter the individual in relationship to his environment, working through multiple sensory modalities. The problem is that these assaults on all modalities can be nonspecific and unpredictable. The elegance of a system is its capacity to do just what is desired, by the simplest mechanism, and with the least energy input—a clean system. Through ages of chants and intonations, sound has proven to be the most durable "clean system." The "Monroe Effect," commercially available under the Hemi-Sync® trademark, is a clean system using only sound patterns.

The Monroe Effect is a psychophysiologic change induced by binaural beat input of two or more specifically identified, electronically engineered sound patterns.

Visual stimulation by light is of interest for comparison with the auditory system. Vision is slower than hearing and can process only intensity, color, slow movement, and pattern. In a way, vision is like a shock absorber that is buffering perceived reality changes from one moment to the next. Hearing is a fast system, and a means to find one's way around this visual interpretation of reality. One thinks of vision as fast from association with its stimulus traveling externally at the speed of light, but it is really a system slow enough to make possible the

flicker-fusion pleasure of the movies. Sound transmission is slow in reaching the body, but is transduced into the body, and handled most rapidly.

This very rapid response in the auditory system permits appraisal of frequency, intensity, sequence, and wave complexity; it permits a comprehensive appreciation of chords and orchestral sounds. With its anatomic specificity and protection, the auditory system has sound as a very special survival mechanism. The brain is accustomed to receiving significant information from this ancient evolutionary system—the very ability to hear. To be able to influence the brain in such a deep way with clean precision is a treasure to be used very carefully.

There is now technology by which one may avail himself of these system traits. "Designer Sound" can be engineered for effect. Sound patterns can be produced, mixed, paired, recorded, and reproduced in stereo or other configurations. The input is to the sides of the head, the face is unobstructed, permitting concurrent function—continuation of daily activities. The responses of individuals or species can be observed by electroencephalograph, magnetic resonance imaging (MRI), Positron Emission Tomography (PET) scan, etc., and adjusted for just the proper effect.

The Monroe tapes do not require additional stimuli. Swamping the central nervous system through over-stimulation (combining flashing lights and other sound devices) loses the desired precision. Mixing sensory inputs is less predictable, unnecessary, and is not advised. The sound patterns have been carefully engineered for specific alterations of consciousness. There is security and safety from the years of testing. There is elegance in the system; it is predictable. The Monroe Effect is from sound only.

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